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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,370	02/28/2002	Michael E. Childs	1528.005US1	2692
21186	7590	12/02/2005		
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH 1600 TCF TOWER 121 SOUTH EIGHT STREET MINNEAPOLIS, MN 55402			EXAMINER MANCHO, RONNIE M	
			ART UNIT 3663	PAPER NUMBER

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/086,370	CHILDS ET AL.	
	Examiner	Art Unit	
	Ronnie Mancho	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status

1. Prosecution of the present case has been reopened in response to the appeal brief submitted 8-24-05. Although the applicant is in disagreement with the rejection, the examiner believes the prior art Ito et al (6484093) disclose compression of data although the word compression was not used. To make matters formal, the examiner has provided a second reference put the rejection in proper form for appeal and to speed up the prosecution.

Claim Rejections - 35 USC § 112

2. Claims 1-12, 25-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1, 9 and 25 1 calls for “the device uses the memory in cooperation with the processor to compress a plurality of coordinate data into reduced sizes”. No where in applicant’s disclosure is such a limitation found. Applicant’s invention is drawn to packing and unpacking data and not to compressing data into reduced sizes. Pate 19, lines 11-18 of applicant’s disclosure is the only section that mentions “compress/packed” and “decompress/unpack”. In this section applicant cites that “Of course, any data structure which uniquely identifies each dimension data 740 and provides an indication to the memory 738 and the processor 736 as to which dimension data 740 to activate or deactivate within the compressed/packed navigation data 732 can be used to decompress/unpack navigation data 734”.

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This clearly shows that the claimed “data structure” provides an indication to the memory 738 and the processor 736 as to which dimension data 740 to activate or deactivate. In addition the said data structure can be used to decompress/unpack navigation data.

Therefore, the applicant’s disclosure teaches away from the claimed “the device uses the *memory in cooperation with the processor to compress a plurality of coordinate data into reduced sizes*”.

In claim 12, “the navigation data are *compressed within the memory*” was not disclosed in the specification.

In claim 25, the limitation “wherein the processor *matches* the values with *portions of the compressed navigation data* using the control data and dynamically *decompresses* those matched portions into larger and original sizes and communicates *the decompressed matched portions* to the display” is not enabled in the specification. Applicant is asked to show where such limitations are disclosed in the specification.

The limitations of claims 27-32 are not enabled.

The rest of the claims are rejected for their dependence on a rejected base claim.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12, 25-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 9, 25 the applicant cites “reduced sizes”. This is indefinite since “reduced sizes” is a relative phrase. It is not understood what sizes are being compared to make a

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distinction. It is therefore not understood if applicant is seeking protection for $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, 3, 5, 1000, etc the size of a given data.

Applicant further cites “at least a portion of activation data”. This is indefinite since a portion could mean $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, etc of data.

In claim 3, the applicant cites “a delta size” and “an optimal size”. It is not understood what applicant is referring to. These are all relative terms and it is not understood what protection the applicant is seeking with these limitations.

In claim 4, the applicant cites “special data”. This is indefinite. This limitation is relative since what might be special to one person may not be to another.

Claims 2-8 are rejected for depending rejected claim 1.

In claim 9, the applicant cites “at least three dimensional data is associated with.....activation”. It is not clear what protection the applicant is seeking here.

In claim 11, “the activation data” lacks antecedent basis.

In claim 25, the limitations “portions”, “larger and original sizes” are indefinite. The applicant further claims “three or more dimensions”. This is not clear since the applicant did not explain or show data with three or more dimensions.

In claims 25 and 27, the limitations “navigation data included control data” and “navigation data includes attribute data”. The data types cannot be differentiated.

In claim 30, “in least in part” is not clear. In addition “a part” is a relative term and is indefinite.

In claim 31, “a part”, “portions” are relative term and are indefinite.

In claim 32, “portions” and “proximate” are indefinite.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 6-12, 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (6484093) in view of Johnson (6456234).

Regarding claim 1, Ito et al (fig. 1; col. 7, lines 1-50) disclose a navigation navigational device 100, comprising:

a processor 101;

a memory 30 in communication with the processor 101 (fig. 1);

a display 106 in communication with the processor 101, wherein the device uses the memory 30 in cooperation with the processor 101 to pack or store a plurality of coordinate data (col. 7, lines 30-45; fig. 4) and associate at least a portion of activation data with each coordinate data ((col. 7, lines 30-45; figs. 13, etc), each coordinate data having three or more dimensions (col. 8, lines 36-47. Note that all GPS data inherently have three or more coordinate representation of positions), and wherein at least a portion of the coordinate data is dynamically communicated to the display (106; col. 7, lines 30-65; col. 11, lines 59 to col. 12, lines 1-5).

Although Ito did not specifically mention compression, it is believed that Ito (col. 7, lines 30-45; fig. 4) at least discloses a form of compression. In order to formalize issues and speed up prosecution of the present case, the examiner has introduced Johnson as a second reference.

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Johnson teaches of a navigation device (figs. 1, 4, 7-16; col. 31, lines 50+) including a display in communication with the processor, wherein the device uses the memory in cooperation with the processor to compress a plurality of coordinate data into reduced sizes and associate a portion of activation data (abstract, fig. 7) with each coordinate data, each coordinate data having three or more dimensions (col. 13, lines 25-46)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ito device as taught by Johnson for the purpose of effectively delivering configured content data that can be instantly activated upon delivery to a user.

The statement of intended use or field of use, "to compress" clause is essentially a method limitation or statement of intended or desired use. Thus, this claim as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See *In re Pearson*, 181 USPQ 641; *In re Yanush*, 177 USPQ 705; *In re Finsterwalder*, 168 USPQ 530; *In re Casey*, 512 USPQ 235; *In re Otto*, 136 USPQ 458; *Ex parte Masham*, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. *In re Danly*, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

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Regarding claim 2, Ito et al disclose the device of claim 1, further comprising an interface device operable to audibly communicate at least a portion of the coordinate data.

Regarding claim 6, Ito et al disclose the device of claim 1, wherein at least one of the dimensions is associated with attribute data relating to at least one of the other dimensions (col. 8, lines 36-47. Note that all GPS data inherently have three or more coordinate representation of positions).

Regarding claim 7, Ito et al disclose the device of claim 1, wherein the device is a handheld portable device.

Regarding claim 8, Ito et al disclose the device of claim 1, wherein the memory 30 is remote from the processor 101.

Regarding claim 9, Ito et al (fig. 1; col. 7, lines 1-50) disclose a navigation system, comprising:

- a mass storage device 30 adapted to store navigation data;

- a server (portable communications systems nowadays use internet; col. 7, lines 7-12) adapted to communicate with the mass storage 30; and

- a navigation device 100 adapted to communicate with and retrieve navigation data from the server via a communication channel (fig. 1), wherein the navigation device includes a processor 101 in communication with a memory 102B, wherein the processor and memory cooperate to store at least three dimensional data (col. 8, lines 36-47. Note that all GPS data inherently have three or more coordinate representation of positions) associated with the navigation data and activation data associated with the at least three dimensional data (col. 7, lines 30-65; col. 11, lines 59 to col. 12, lines 1-5).

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Although Ito did not specifically mention compression, it is believed that Ito (col. 7, lines 30-45; fig. 4) at least discloses a form of compression. In order to formalize issues and speed up prosecution of the present case, the examiner has introduced Johnson as a second reference. Johnson teaches of a navigation device (figs. 1, 4, 7-16; col. 31, lines 50+) including a display in communication with the processor, wherein the device uses the memory in cooperation with the processor to compress a plurality of coordinate data into reduced sizes and associate a portion of activation data (abstract, fig. 7) with each coordinate data, each coordinate data having three or more dimensions (col. 13, lines 25-46)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ito device as taught by Johnson for the purpose of effectively delivering configured content data that can be instantly activated upon delivery to a user.

The statement of intended use or field of use, "adapted to" clause is essentially a method limitation or statement of intended or desired use. Thus, this claim as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See *In re Pearson*, 181 USPQ 641; *In re Yanush*, 177 USPQ 705; *In re Finsterwalder*, 168 USPQ 530; *In re Casey*, 512 USPQ 235; *In re Otto*, 136 USPQ 458; *Ex parte Masham*, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. *In re Danly*, 120 USPQ 528, 531.

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Apparatus claims cover what a device is not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Regarding claim 10, Ito et al disclose the system of claim 9, wherein the communication channel includes a wireless channel.

Regarding claim 11, Ito et al (inherently) disclose the system of claim 9, wherein the activation data are configurable to activate or deactivate each dimension within the at least three dimensional data of the navigation data.

Regarding claim 12, Ito et al disclose the system of claim 11, wherein the navigation data are compressed within the memory.

Regarding claim 25, Ito et al disclose a navigational device, comprising:
a memory;
a display;
a processor that cooperates with the memory to store navigation data having three or more dimensions wherein the navigation data includes control data and coordinate data.

Although Ito did not specifically mention compression, it is believed that Ito (col. 7, lines 30-45; fig. 4) at least discloses a form of compression. In order to formalize issues and speed up prosecution of the present case, the examiner has introduced Johnson as a second reference. Johnson teaches of a navigation device (figs. 1, 4, 7-16; col. 31, lines 50+) including a display in communication with the processor, wherein the device uses the memory in cooperation with the processor to compress a plurality of coordinate data into reduced sizes and associate a portion of

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activation data (abstract, fig. 7) with each coordinate data, each coordinate data having three or more dimensions (col. 13, lines 25-46)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ito device as taught by Johnson for the purpose of effectively delivering configured content data that can be instantly activated upon delivery to a user.

Thus Ito in view of Johnson disclose a Global Positioning Satellite (GPS) receiver that cooperates with the processor and provides to the processor specific values for coordinate data, wherein the processor matches the values with portions of the compressed navigation data using the control data and dynamically decompresses those matched portions and communicates the decompressed matched portions to the display.

Regarding claim 26, Ito et al disclose the navigational device of claim 25, wherein the navigation device is a portable digital assistant.

Regarding claim 27, Ito et al disclose the navigation device of claim 25, wherein the navigation data includes attribute data within one or more of the three or more dimensions, and wherein the attribute data drives presentation effects of the decompressed matched portions on the display.

Regarding claim 28, Ito et al disclose the navigation device of claim 25, wherein the navigational device transmits the decompressed matched portions to an external device.

Regarding claim 29, Ito et al disclose the navigational device of claim 25, wherein each of the three or more dimensions include cartographic data.

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Regarding claim 30, Ito et al disclose the navigational device of claim 25, wherein the decompressed match portions represent in least in part a current position of the device within a route that the device is traveling along.

Regarding claim 31, Ito et al disclose the navigational device of claim 25 further comprising an audio device in cooperation with the processor, wherein the audio device communicates at least a part of the decompressed matched portions audibly.

Regarding claim 32, Ito et al disclose the navigational device of claim 25 wherein at least one of the three or more dimensions associated with the decompressed matched portions includes landmark data proximate to the navigational device.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (6314369) and Johnson (6456234) as applied to claim 1 and further in view of Robinson et al (5995970).

Regarding claim 3, Ito et al and Johnson disclose the device of claim 1, but did not disclose a delta size associated with an optimal size. However, Robinson et al (abstract; col. 1, lines 38-60; claim 1) disclose a storage medium for storing navigational data, wherein each

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dimension of coordinate data includes a delta size associated with an optimal size to pack i.e. compress each coordinate data.

Therefore, it would have been obvious to one of ordinary skill in the art of navigation to modify the Ito/Johnson device as taught by Robinson for the purpose of saving memory space when storing navigation data.

Regarding claim 4, Ito et al (col. 1, lines 62-67) as modified by Johnson disclose the device of claim 3, wherein at least one of the coordinate data exceed the delta size associated with compressing the at least one coordinate data and wherein associating one or more special data ensures the at least one coordinate data are compressed within the delta size associated with the coordinate data.

Regarding claim 5, Ito et al as modified by Johnson disclose the device of claim 4, wherein:

each dimension is associated with a direction; and

if each direction within each dimension of each associated coordinate data proceeds in a same direction then using a single sign data (col. 2, lines 4-12) for each dimension to compress each coordinate data.

The statements of intended use or field of use, " if each direction within each dimension of each associated coordinate data proceeds in a same direction then using a single sign data for each dimension to compress each coordinate data." clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In

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re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Ronnie Mancho
Examiner
Art Unit 3663

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11/23/05


JACK KEITH
SUPERVISORY PATENT EXAMINER